PROJECT NUMBER: 2107
PROJECT TITLE: Filter Research & Development
PROJECT LEADER: C. J. Campbell
PERIOD COVERED: September, 1988

I. FILTER RESEARCH & DEVELOPMENT GROUP

A. Objective: Consolidate efforts on filter research and development into one group and actively pursue the development of improved filter systems.

B. Status: A meeting with R&D at FTR was held on September 20 to exchange information on filter development projects. The goals and specific activities of PM USA's new Filter Research and Development project were presented and discussed. FTR presented a status report on their pertinent work including tube-in-tow, and CA web vs paper. A meeting was also held with Intertaba to discuss their capability of processing paper and CA web into filter rods.

II. FILTER SUPPORT FOR MAJOR PROGRAMS

A. Objective: Provide design assistance and potential new filter systems for major R&D programs.

B. Status: Design assistance and testing of filter effectiveness continues on several major projects.

III. CELLULOSE ACETATE WEB

A. Objective: Explore the potential advantages of CA web for use as a high efficiency filter material.

B. Status: Dexter continues to delay the manufacture of the experimental CA web rods we requested because they have not supplied the web material to Celanese. A clear reason for this delay is not apparent, but Celanese management has become involved. Celanese now expects to deliver samples the third week in October.

C. Plans: Evaluate samples for efficiency and subjectives.

IV. IMPROVED MENTHOL STABILITY

A. Objective: Investigate methods of improving the stability of menthol delivery in smoke in aged cigarettes.

B. Status: Samples of filter plugs made by Filtrona with their steam cured process have been made into menthol cigarettes and are now in accelerated ageing. Menthol content of the filter during ageing and delivery of menthol in smoke will be compared to a

2000832247

Source: https://www.industrydocuments.ucsf.edu/docs/lpfm0000

control cigarette to test the ability of the heat set filter to resist menthol absorption.

PVA menthol models of Marlboro Lights Menthol have been made in the semiworks and are being subjectively evaluated.

A model of Philip Morris Lights with PVA menthol has also been made in the Semiworks and will be evaluated. This is being done in an effort to combine a charcoal filter with menthol delivery.

V. TOW VENDOR R&D COORDINATION

A. Objective: Coordinate specific requests for R&D work by Eastman and Celanese.

B. Status: At our request, Eastman has produced and submitted sample rods made from low denier tow (1.6/41000). An initial evaluation shows that an increased efficiency was achieved (73% vs 64% for MUL at same RTD). This may allow the construction of ultra low delivery cigarettes with reduced ventilation. A more comprehensive test is being planned that will include subjective evaluation.

VI. FILTER ADDITIVES

A. Objective: Investigate the effects of filter additives for analytical and subjective benefits.

B. Status: Initial testing of FML filters with hand applied additives has identified potential candidates for modification of subjectives. Machine made plugs with consistently applied additives will now be made and subjectively evaluated.

Samples of GCC Marlboro cigarettes with filter additives are being made in the semiworks and will be evaluated for nicotine delivery, tar delivery and subjectives.

C. Plans: Produce FML filters with additives and evaluate.

2000832248

Source: https://www.industrydocuments.ucsf.edu/docs/lpfm0000